WELL NAME:	Morrison Unit #1
COMPANY:	Imperial American / Hal C. Porter
LOCATION:	06-21S-13W
	Stafford County Kansas
DATE:	06/16/97

TRILOBITE TESTING L.L.C.

OPERATOR : Hal C. Porter
WELL NAME: Morrison Unit #1
LOCATION : Sec.06 Twp.21s Rge.13w Ks
INTERVAL : 3441.00 To 3500.00 ft

DATE 06-11-97
KB 1923.00 ft
GR 1914.00 ft
TD 3500.00 ft
TICKET NO: 9724
FORMATION: Lans.
TEST TYPE: CONV
DST #1

RECORDER DATA

Mins			Field	1	2	3	4
PF	30	Rec.	10248	10248	3030		
SI	30	Range(Psi)	4400.0	4400.0	4995.0	0.0	0.0
SF	30	Clock(hrs)	12hr.	12hr.	Elec		
FS	30	Depth(ft)	3497.0	3497.0	3452.0	0.0	0.0

TIME DATA----------
PF Fr. 1205 to 1235 hr
IS Fr. 1235 to 1305 hr
SF Fr. 1305 to 1335 hr
FS Fr. 1335 to 1405 hr

	Field	1	2	3	4
A. Init Hydro	1738.0	1741.0	1707.0	0.0	0.0
B. First Flow	55.0	68.0	23.0	0.0	0.0
B1. Final Flow	55.0	57.0	24.0	0.0	0.0
C. In Shut-in	182.0	181.0	173.0	0.0	0.0
D. Init Flow	57.0	68.0	25.0	0.0	0.0
E. Final Flow	57.0	61.0	25.0	0.0	0.0
F. Fl Shut-in	139.0	138.0	129.0	0.0	0.0
G. Final Hydro	1712.0	1644.0	1662.0	0.0	0.0
Inside/Outside		O	O	I	

T STARTED 1026 hr
T ON BOTM 1201 hr
T OPEN 1205 hr
T PULLED 1409 hr
T OUT 1550 hr

RECOVERY
Tot Fluid 10.00 ft of 10.00 ft in DC and 0.00 ft in DP
10.00 ft of Very Slight Oil Cut Mud
0.00 ft of 1%oil 99%mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of EST. FT. OF PAY----------5
SALINITY 4000.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	2100.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	72000.00 lbs
Initial Str Wt	62000.00 lbs
Unseated Str Wt	62000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	483.00 ft
D.P. Length	2953.00 ft

BLOW DESCRIPTION
Initial Flow:
Weak blow, (1/4" or less)

Initial Shut In:

Final Flow:
Very weak blow. (dead in 10 mins.)

Final Shut In:

MUD DATA----------

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	50.00 S/L
W.L.	8.80 in3
F.C.	0.20 in
Mud Drop	N
Amt. of fill	0.00 ft
Btm. H. Temp.	101.00 F
Hole Condition	good
% Porosity	10.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00 N
Cushion Type	None
Reversed Out	N
Tool Chased	N
Tester	Gary Pevoteaux
Co. Rep.	Randall Kilian
Contr.	Sterling Drlg.
Rig #	4
Unit #	
Pump T.	

SAMPLES: none
SENT TO:Caraway / Liberal Ks

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Morrison Unit #1

LOCATION : Sec.06 Twp.21s Rge.13w Ks

TICKET No. 9724 D.S.T. No. 1 DATE 06-11-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 28

TOTAL TOOL 48

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 31

TOTAL ASSEMBLY 79

D.C. ABOVE TOOLS.Stands8 Single Total 483

D.P. ABOVE TOOLS.Stands48 Single Total 2953

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3515

TOTAL DEPTH 3500

TOTAL DRILL PIPE ABOVE K.B. 15

REMARKS:

FLUID SAMPLER DATA (not run)

GAS---------- Cubic Ft.
OIL---------- ML.
MUD---------- ML.
WATER---------- ML.
OTHER---------- ML.
PRESSURE---------- PSI
RW---------- OHMS @
DEGREES F
CHLORIDES---------- ppm.

P.O. SUB
C.O. SUB Top of tool @ 3421
S.I. TOOL H & T 3427
HMV Sterling 3432
JARS Sterling no
SAFETY JOINT Bowen no
PACKER Top 3436
PACKER Bottom 3441
DEPTH 3441
STUBB 1' 3442
ANCHOR
6' perfs to 3448
Alpine rec. @ 3452
1 jt. pipe to 3479
T.C.
DEPTH
16 ft. perfs to 3495
AK-1 rec. @ 3497
BULLNOSE 5' Perforated to T.D. 3500

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9724 DST#1 MORRISON #1 HAL C. PORTER

DATE: 06/11/97 TIME: 10:26:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	95.50	1707.0	0.0	98.23		
****** Start Flow 1	0.00	22.9	0.0	98.39		
	0.50	23.0	0.0	98.42		
	1.00	22.9	-0.1	98.44		
	1.50	22.7	-0.2	98.45		
	2.00	22.7	-0.3	98.45		
	2.50	22.6	-0.3	98.45		
	3.00	22.6	-0.3	98.46		
	3.50	22.6	-0.4	98.46		
	4.00	22.6	-0.4	98.46		
	4.50	22.5	-0.5	98.46		
	5.00	22.5	-0.5	98.47		
	5.50	22.4	-0.5	98.48		
	6.00	22.4	-0.5	98.48		
	6.50	22.5	-0.4	98.50		
	7.00	22.6	-0.4	98.51		
	7.50	22.6	-0.4	98.52		
	8.00	22.6	-0.3	98.54		
	8.50	22.6	-0.4	98.55		
	9.00	22.6	-0.4	98.56		
	9.50	22.6	-0.4	98.58		
	10.00	22.5	-0.4	98.60		
	10.50	22.5	-0.4	98.62		
	11.00	22.5	-0.4	98.63		
	11.50	22.6	-0.4	98.66		
	12.00	22.7	-0.3	98.67		
	12.50	22.7	-0.2	98.69		
	13.00	22.8	-0.2	98.70		
	13.50	22.8	-0.2	98.72		
	14.00	22.8	-0.1	98.74		
	14.50	22.9	-0.1	98.76		
	15.00	22.9	-0.1	98.78		
	15.50	22.9	-0.0	98.79		
	16.00	22.9	-0.0	98.81		
	16.50	22.9	0.0	98.83		
	17.00	23.0	0.0	98.85		
	17.50	23.0	0.1	98.87		
	18.00	23.0	0.1	98.88		
	18.50	23.1	0.1	98.90		
	19.00	23.1	0.1	98.92		
	19.50	23.1	0.2	98.93		
	20.00	23.2	0.2	98.95		
	20.50	23.2	0.2	98.97		
	21.00	23.2	0.2	98.99		
	21.50	23.2	0.3	99.01		
	22.00	23.2	0.3	99.02		
	22.50	23.3	0.3	99.04		
	23.00	23.3	0.3	99.05		
	23.50	23.3	0.4	99.07		
	24.00	23.3	0.4	99.08		
	24.50	23.4	0.4	99.10		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9724 DST#1 MORRISON #1 HAL C. PORTER

DATE: 06/11/97 TIME: 10:26:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	23.4	0.5	99.12		
	25.50	23.4	0.4	99.14		
	26.00	23.4	0.5	99.15		
	26.50	23.4	0.5	99.17		
	27.00	23.5	0.5	99.19		
	27.50	23.5	0.6	99.20		
	28.00	23.5	0.6	99.22		
	28.50	23.5	0.6	99.23		
	29.00	23.5	0.6	99.25		
	29.50	23.5	0.6	99.26		
	30.00	23.6	0.6	99.28		
	30.50	23.6	0.6	99.29		
	31.00	23.6	0.7	99.31		
	31.50	23.6	0.7	99.33		
	32.00	23.6	0.7	99.34		
***** End Flow 1	32.50	23.6	0.6	99.35		
***** Start Shutin 1	0.00	23.6	0.0	99.35	0.0000	0.001
	0.50	23.6	0.0	99.37	66.0000	0.001
	1.00	23.6	0.0	99.39	33.5000	0.001
	1.50	23.6	0.1	99.40	22.6667	0.001
	2.00	23.7	0.1	99.41	17.2500	0.001
	2.50	23.8	0.2	99.43	14.0000	0.001
	3.00	23.9	0.4	99.45	11.8333	0.001
	3.50	24.2	0.6	99.46	10.2857	0.001
	4.00	24.6	1.0	99.47	9.1250	0.001
	4.50	25.1	1.5	99.48	8.2222	0.001
	5.00	25.8	2.2	99.50	7.5000	0.001
	5.50	26.5	2.9	99.51	6.9091	0.001
	6.00	27.3	3.8	99.53	6.4167	0.001
	6.50	28.3	4.7	99.54	6.0000	0.001
	7.00	29.2	5.7	99.56	5.6429	0.001
	7.50	30.3	6.7	99.57	5.3333	0.001
	8.00	31.4	7.9	99.59	5.0625	0.001
	8.50	32.6	9.0	99.60	4.8235	0.001
	9.00	33.8	10.3	99.61	4.6111	0.001
	9.50	35.2	11.7	99.62	4.4211	0.001
	10.00	36.7	13.2	99.64	4.2500	0.001
	10.50	38.2	14.7	99.65	4.0952	0.001
	11.00	39.8	16.2	99.66	3.9545	0.002
	11.50	41.4	17.9	99.68	3.8261	0.002
	12.00	43.1	19.5	99.69	3.7083	0.002
	12.50	44.8	21.2	99.71	3.6000	0.002
	13.00	46.6	23.1	99.72	3.5000	0.002
	13.50	48.5	25.0	99.74	3.4074	0.002
	14.00	50.3	26.8	99.75	3.3214	0.003
	14.50	51.7	28.2	99.77	3.2414	0.003
	15.00	53.3	29.7	99.77	3.1667	0.003
	15.50	54.9	31.3	99.79	3.0968	0.003
	16.00	56.5	32.9	99.80	3.0312	0.003
	16.50	58.2	34.7	99.81	2.9697	0.003
	17.00	60.1	36.5	99.83	2.9118	0.004

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9724 DST#1 MORRISON #1 HAL C. PORTER

DATE: 06/11/97 TIME: 10:26:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	17.50	62.0	38.4	99.84	2.8571	0.004
	18.00	64.0	40.5	99.86	2.8056	0.004
	18.50	66.4	42.9	99.86	2.7568	0.004
	19.00	68.9	45.3	99.88	2.7105	0.005
	19.50	71.3	47.8	99.89	2.6667	0.005
	20.00	73.7	50.1	99.91	2.6250	0.005
	20.50	75.9	52.3	99.92	2.5854	0.006
	21.00	78.0	54.5	99.93	2.5476	0.006
	21.50	80.2	56.6	99.94	2.5116	0.006
	22.00	82.4	58.8	99.96	2.4773	0.007
	22.50	86.8	63.2	99.97	2.4444	0.008
	23.00	91.7	68.1	99.98	2.4130	0.008
	23.50	96.7	73.1	99.99	2.3830	0.009
	24.00	101.8	78.3	100.01	2.3542	0.010
	24.50	107.2	83.7	100.02	2.3265	0.011
	25.00	112.3	88.7	100.03	2.3000	0.013
	25.50	118.1	94.5	100.04	2.2745	0.014
	26.00	124.3	100.7	100.06	2.2500	0.015
	26.50	130.6	107.0	100.07	2.2264	0.017
	27.00	137.2	113.7	100.08	2.2037	0.019
	27.50	144.0	120.4	100.10	2.1818	0.021
	28.00	150.8	127.3	100.11	2.1607	0.023
	28.50	157.9	134.3	100.12	2.1404	0.025
	29.00	165.2	141.6	100.14	2.1207	0.027
****** End Shut-in 1	29.50	172.6	149.1	100.15	2.1017	0.030
****** Start Flow 2	0.00	25.1	0.0	100.16		
	0.50	24.8	-0.3	100.17		
	1.00	24.6	-0.5	100.18		
	1.50	24.6	-0.5	100.19		
	2.00	24.6	-0.5	100.20		
	2.50	24.7	-0.4	100.21		
	3.00	24.7	-0.4	100.22		
	3.50	24.7	-0.4	100.23		
	4.00	24.8	-0.3	100.24		
	4.50	24.8	-0.3	100.24		
	5.00	24.8	-0.3	100.25		
	5.50	24.9	-0.2	100.26		
	6.00	24.9	-0.2	100.27		
	6.50	24.9	-0.2	100.29		
	7.00	24.9	-0.2	100.30		
	7.50	24.9	-0.2	100.31		
	8.00	24.9	-0.2	100.32		
	8.50	24.9	-0.2	100.32		
	9.00	25.0	-0.1	100.33		
	9.50	25.0	-0.1	100.35		
	10.00	25.0	-0.1	100.36		
	10.50	25.0	-0.1	100.37		
	11.00	25.0	-0.1	100.38		
	11.50	25.0	-0.1	100.39		
	12.00	25.0	-0.1	100.40		
	12.50	25.1	0.0	100.41		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9724 DST#1 MORRISON #1 HAL C. PORTER

DATE: 06/11/97 TIME: 10:26:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	13.00	25.1	-0.0	100.42		
	13.50	25.1	-0.0	100.43		
	14.00	25.1	-0.0	100.44		
	14.50	25.1	-0.0	100.45		
	15.00	25.1	0.0	100.46		
	15.50	25.1	0.0	100.47		
	16.00	25.1	0.0	100.48		
	16.50	25.1	0.0	100.49		
	17.00	25.1	0.0	100.50		
	17.50	25.2	0.1	100.51		
	18.00	25.1	0.0	100.52		
	18.50	25.2	0.1	100.53		
	19.00	25.2	0.1	100.54		
	19.50	25.2	0.1	100.56		
	20.00	25.2	0.1	100.56		
	20.50	25.2	0.1	100.57		
	21.00	25.3	0.2	100.58		
	21.50	25.3	0.2	100.59		
	22.00	25.3	0.2	100.60		
	22.50	25.3	0.2	100.61		
	23.00	25.3	0.2	100.62		
	23.50	25.3	0.2	100.64		
	24.00	25.3	0.2	100.64		
	24.50	25.2	0.1	100.65		
	25.00	25.2	0.1	100.66		
	25.50	25.2	0.1	100.67		
	26.00	25.2	0.1	100.69		
	26.50	25.2	0.1	100.69		
	27.00	25.2	0.1	100.70		
	27.50	25.2	0.1	100.71		
	28.00	25.2	0.1	100.72		
	28.50	25.2	0.1	100.73		
	29.00	25.2	0.1	100.74		
	29.50	25.0	-0.1	100.75		
	30.00	25.0	-0.1	100.76		
	30.50	25.0	-0.1	100.77		
	31.00	25.1	-0.0	100.78		
****** End Flow 2	31.50	25.0	-0.1	100.79		
****** Start Shutin 2	0.00	25.0	0.0	100.79	0.0000	0.001
	0.50	25.1	0.0	100.80	129.0000	0.001
	1.00	25.1	0.1	100.81	65.0000	0.001
	1.50	25.3	0.3	100.82	43.6667	0.001
	2.00	25.4	0.4	100.82	33.0000	0.001
	2.50	25.7	0.7	100.84	26.6000	0.001
	3.00	26.0	1.0	100.85	22.3333	0.001
	3.50	26.4	1.4	100.85	19.2857	0.001
	4.00	26.9	1.9	100.86	17.0000	0.001
	4.50	27.4	2.4	100.87	15.2222	0.001
	5.00	28.0	3.0	100.88	13.8000	0.001
	5.50	28.7	3.7	100.89	12.6364	0.001
	6.00	29.4	4.4	100.90	11.6667	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9724 DST#1 MORRISON #1 HAL C. PORTER

DATE: 06/11/97 TIME: 10:26:17

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
6.50	30.1	5.1	100.91	10.8462	0.001
7.00	30.9	5.9	100.92	10.1429	0.001
7.50	31.7	6.6	100.93	9.5333	0.001
8.00	32.5	7.5	100.94	9.0000	0.001
8.50	33.3	8.3	100.95	8.5294	0.001
9.00	34.1	9.1	100.96	8.1111	0.001
9.50	35.0	10	100.97	7.7368	0.001
10.00	35.9	10.9	100.98	7.4000	0.001
10.50	36.9	11.8	100.99	7.0952	0.001
11.00	37.8	12.8	101.00	6.8182	0.001
11.50	38.8	13.8	101.00	6.5652	0.002
12.00	39.9	14.8	101.01	6.3333	0.002
12.50	41.0	15.9	101.02	6.1200	0.002
13.00	42.1	17.0	101.03	5.9231	0.002
13.50	43.2	18.2	101.04	5.7407	0.002
14.00	44.4	19.4	101.05	5.5714	0.002
14.50	45.6	20.5	101.06	5.4138	0.002
15.00	46.8	21.7	101.07	5.2667	0.002
15.50	47.8	22.8	101.08	5.1290	0.002
16.00	49.1	24.1	101.09	5.0000	0.002
16.50	50.5	25.4	101.09	4.8788	0.003
17.00	51.8	26.8	101.10	4.7647	0.003
17.50	53.3	28.2	101.11	4.6571	0.003
18.00	54.7	29.6	101.12	4.5556	0.003
18.50	56.2	31.2	101.13	4.4595	0.003
19.00	57.8	32.7	101.14	4.3684	0.003
19.50	59.4	34.3	101.15	4.2821	0.004
20.00	61.0	36.0	101.16	4.2000	0.004
20.50	62.7	37.7	101.17	4.1220	0.004
21.00	64.5	39.5	101.18	4.0476	0.004
21.50	66.3	41.2	101.19	3.9767	0.004
22.00	68.1	43.0	101.20	3.9091	0.005
22.50	70.1	45.0	101.20	3.8444	0.005
23.00	72.1	47.0	101.21	3.7826	0.005
23.50	74.1	49.1	101.22	3.7234	0.005
24.00	76.1	51.1	101.23	3.6667	0.006
24.50	78.3	53.3	101.24	3.6122	0.006
25.00	80.4	55.4	101.25	3.5600	0.006
25.50	82.6	57.5	101.26	3.5098	0.007
26.00	85.1	60.0	101.27	3.4615	0.007
26.50	87.6	62.6	101.28	3.4151	0.008
27.00	90.3	65.3	101.29	3.3704	0.008
27.50	93.1	68.1	101.29	3.3273	0.009
28.00	95.9	70.8	101.30	3.2857	0.009
28.50	98.8	73.7	101.31	3.2456	0.01
29.00	101.8	76.7	101.32	3.2069	0.010
29.50	104.9	79.9	101.33	3.1695	0.011
30.00	108.2	83.1	101.34	3.1333	0.012
30.50	111.5	86.4	101.35	3.0984	0.012
31.00	114.9	89.8	101.36	3.0645	0.013
31.50	118.4	93.4	101.37	3.0317	0.014

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9724 DST#1 MORRISON #1 HAL C. PORTER

DATE: 06/11/97 TIME: 10:26:17

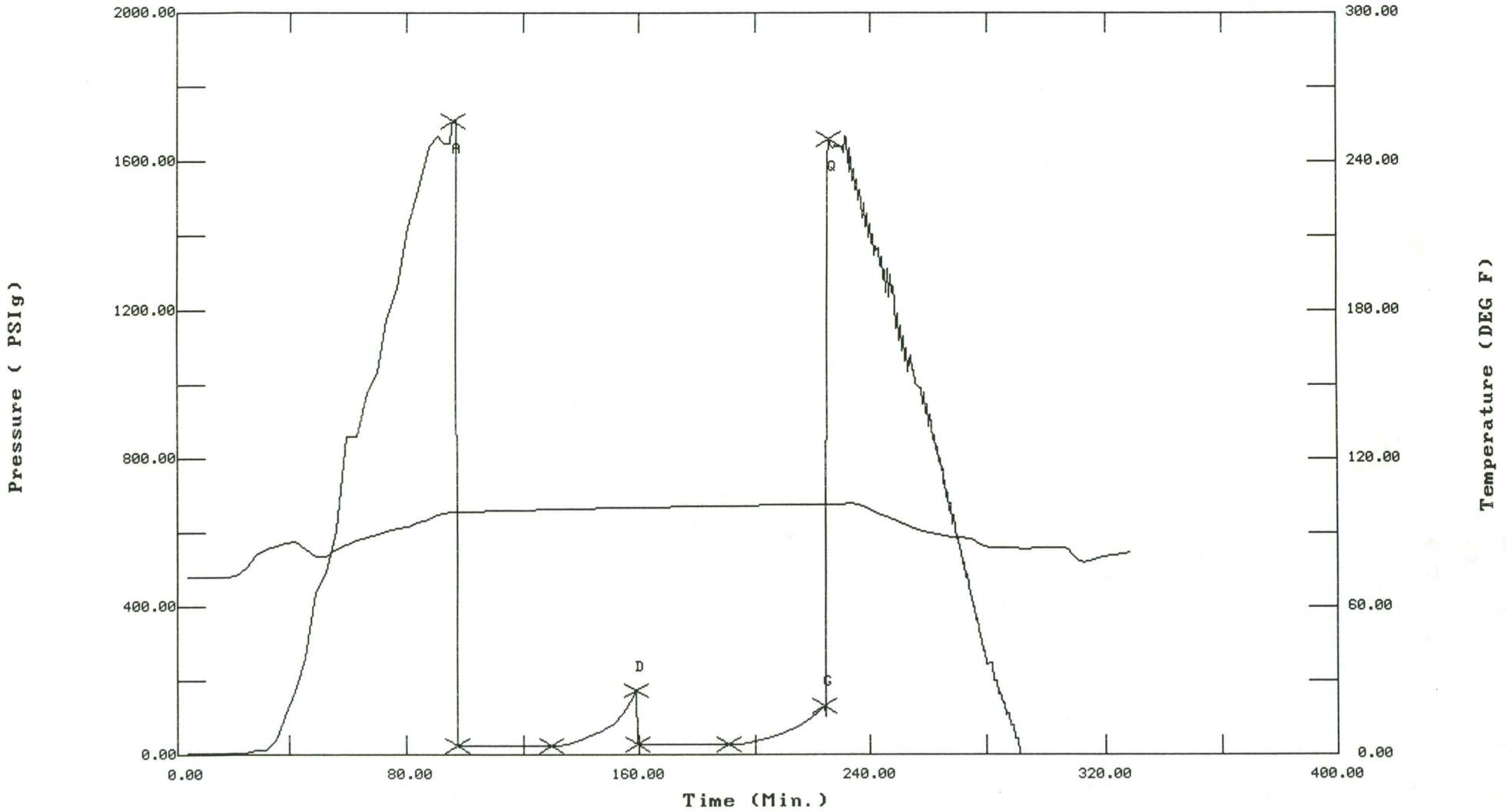
	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	32.00	121.8	96.8	101.38	3.0000	0.015
	32.50	125.2	100.2	101.38	2.9692	0.016
****** End Shut-in 2	33.00	129.0	103.9	101.39	2.9394	0.017
****** Final Hydro.	225.50	1662.1	0.0	101.46		

TEST HISTORY

9724 DST#1 MORRISON #1 HAL C. PORTER

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1706.99
B:	0.00	22.94
C:	32.50	23.56
D:	29.50	172.64
E:	0.00	25.10
F:	31.50	25.04
G:	33.00	128.96
Q:	0.00	1662.12



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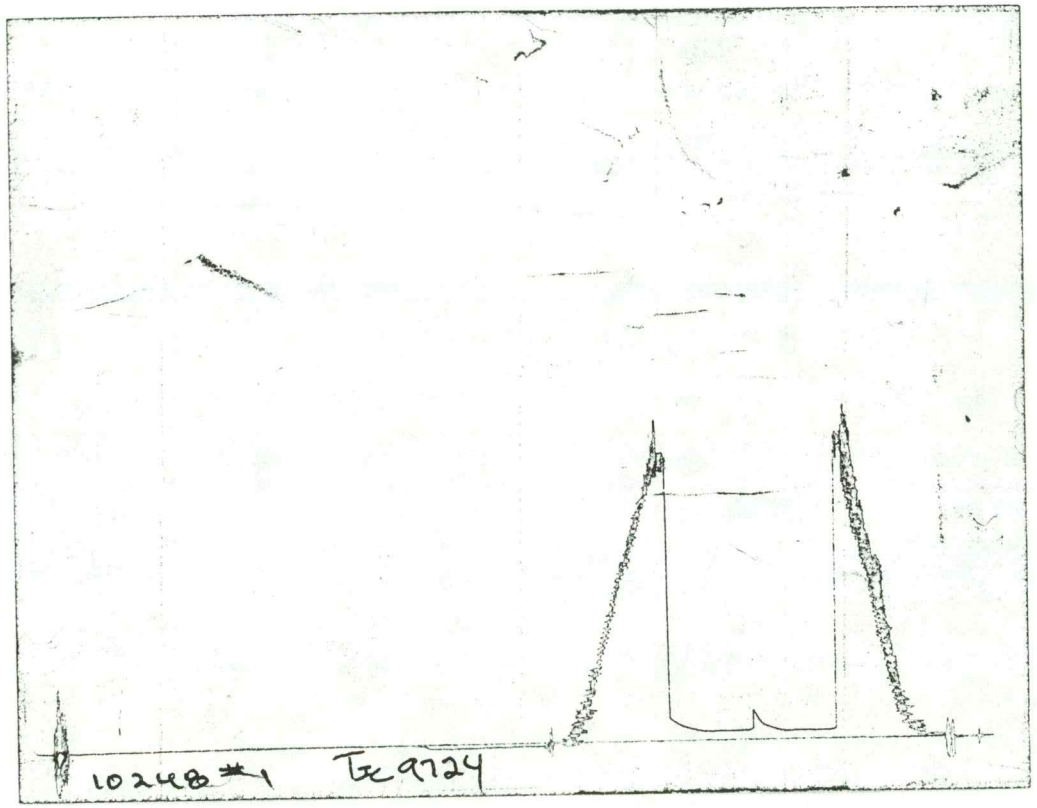


This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 9724

Well Name & No. MORRISON UNIT #1 Test No. 1 Date 6-11-97

Company HAL C. PORTER Zone Tested LANS H, I, J

Address P.O. BOX 18515 / FOUNTAIN HILLS AZ. 85269 Elevation 1923 KB 1914 GL

Co. Rep / Geo. RANDALL KILIAN Cont. STERLING DRLG. #4 Est. Ft. of Pay 5 Por. 10 %

Location: Sec. 6 Twp. 21S Rge. 13W Co. STAFFORD State KS.

No. of Copies 5 Distribution Sheet (Y, N) N Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3441 - 3500' Initial Str Wt./Lbs. 62,000 Unseated Str Wt./Lbs. 62,000

Anchor Length 59' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 72,000

Top Packer Depth 3436' Tool Weight 2100#

Bottom Packer Depth 3441' Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓

Total Depth 3500' Wt. Pipe Run NONE Drill Collar Run 483

Mud Wt. 9.1 LCM ~ Vis. 50 WL 8.8cc Drill Pipe Size 4½" X.H. Ft. Run 2953'

Blow Description IF: Weak blow. (¼" or less)

FF: Very weak surface blow. (died in 10 mins.)

Recovery — Total Feet 10 GIP Trace Ft. in DC 10 Ft. in DP ~

Rec. 10	Feet Of S.O.C.M.	%gas	1 or less %oil	%water 99	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 101 °F Gravity N/A °API D@ ~ °F Corrected Gravity N/A °API

RW N.C. @ ~ °F Chlorides 4,000 ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud	1738	1707	PSI	Recorder No.	10248	T-Started	1026
(B) First Initial Flow Pressure	55	23	PSI	(depth)	3497'	T-Open	1205
(C) First Final Flow Pressure	55	24	PSI	Recorder No. (alpine)	3030	T-Pulled	1407
(D) Initial Shut-in Pressure	182	173	PSI	(depth)	3452'	T-Out	1550
(E) Second Initial Flow Pressure	57	25	PSI	Recorder No.	~		
(F) Second Final Flow Pressure	57	25	PSI	(depth)	~		
(G) Final Shut-in Pressure	139	129	PSI	Initial Opening	30	Test	✓ 600.00
(H) Final Hydrostatic Mud	1712	1662	PSI	Initial Shut-in	30	Jars	
	AK-1	alpine		Final Flow	30	Safety Joint	
				Final Shut-in	30	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Elect. Rec.	✓ 150.00
						Other	
						TOTAL PRICE $	✓ 750.00

Approved By Randall Kilian

Our Representative Tony Pivoteau

TRILOBITE TESTING L.L.C.

'ERATOR : Hal C. Porter
:LL NAME: Morrison Unit #1
)CATION : Sec.06 Twp.21s Rge.13w Ks
'TERVAL : 3540.00 To 3591.00 ft

DATE 06-12-97
KB 1923.00 ft TICKET NO: 9725 DST #2
GR 1914.00 ft FORMATION: Arbuckle
TD 3591.00 ft TEST TYPE: CONV

:CORDER DATA

lins		Field	1	2	3	4
' 30	Rec.	10248	10248	3030		
: 30	Range(Psi)	4400.0	4400.0	4995.0	0.0	0.0
' 30	Clock(hrs)	12hr.	12hr.	Elec		
; 60	Depth(ft)	3588.0	3588.0	3550.0	0.0	0.0

TIME DATA----------
PF Fr. 0205 to 0235 hr
IS Fr. 0235 to 0305 hr
SF Fr. 0305 to 0335 hr
FS Fr. 0335 to 0435 hr

	Field	1	2	3	4
Init Hydro	1824.0	1845.0	1804.0	0.0	0.0
First Flow	87.0	95.0	68.0	0.0	0.0
.. Final Flow	333.0	325.0	318.0	0.0	0.0
In Shut-in	1097.0	1089.0	1086.0	0.0	0.0
Init Flow	359.0	358.0	331.0	0.0	0.0
Final Flow	453.0	446.0	441.0	0.0	0.0
Fl Shut-in	1122.0	1102.0	1108.0	0.0	0.0
Final Hydro	1778.0	1807.0	1761.0	0.0	0.0
ıside/Outside	O	O	I		

T STARTED 0002 hr
T ON BOTM 0200 hr
T OPEN 0205 hr
T PULLED 0437 hr
T OUT 0750 hr

TOOL DATA----------

Tool Wt.	2100.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	72000.00 lbs
Initial Str Wt	64000.00 lbs
Unseated Str Wt	68000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	483.00 ft
D.P. Length	3055.00 ft

ECOVERY
ɔt Fluid 1220.00 ft of 483.00 ft in DC and 737.00 ft in DP
20.00 ft of Gas in pipe.
.00 ft of
)50.00 ft of Clean Gassy Oil
.00 ft of 12%gas 88%oil
70.00 ft of Gassy Oil Cut Mud
.00 ft of 25%gas 25%oil 50%mud
.00 ft of
.00 ft of EST. FT. OF PAY----------5
ALINITY 4000.00 P.P.M. A.P.I. Gravity 37.60

MUD DATA----------

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	52.00 S/L
W.L.	8.80 in3
F.C.	0.20 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	109.00 F
Hole Condition	good
% Porosity	12.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00 N
Cushion Type	None
Reversed Out N	
Tool Chased N	
Tester	Gary Pevoteaux
Co. Rep.	Randall Kilian
Contr.	Sterling Drlg.
Rig #	4
Unit #	
Pump T.	

LOW DESCRIPTION
nitial Flow:
Strong blow, bottom of bucket in 3 min

nitial Shut In:
Weak to fair blow (1-8")

inal Flow:
Strong blow, bottom of bucket in 4 min

inal Shut In:
Weak blow (1/2")

AMPLES: none
ENT TO:Caraway / Liberal Ks

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Morrison Unit #1

LOCATION : Sec.06 Twp.21s Rge.13w Ks

TICKET No. 9725 D.S.T. No. 2 DATE 06-12-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 21

TOTAL TOOL 41

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 30

TOTAL ASSEMBLY 71

D.C. ABOVE TOOLS.Stands8 Single Total 483

D.P. ABOVE TOOLS.Stands49 Single 1 Total 3055

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3609

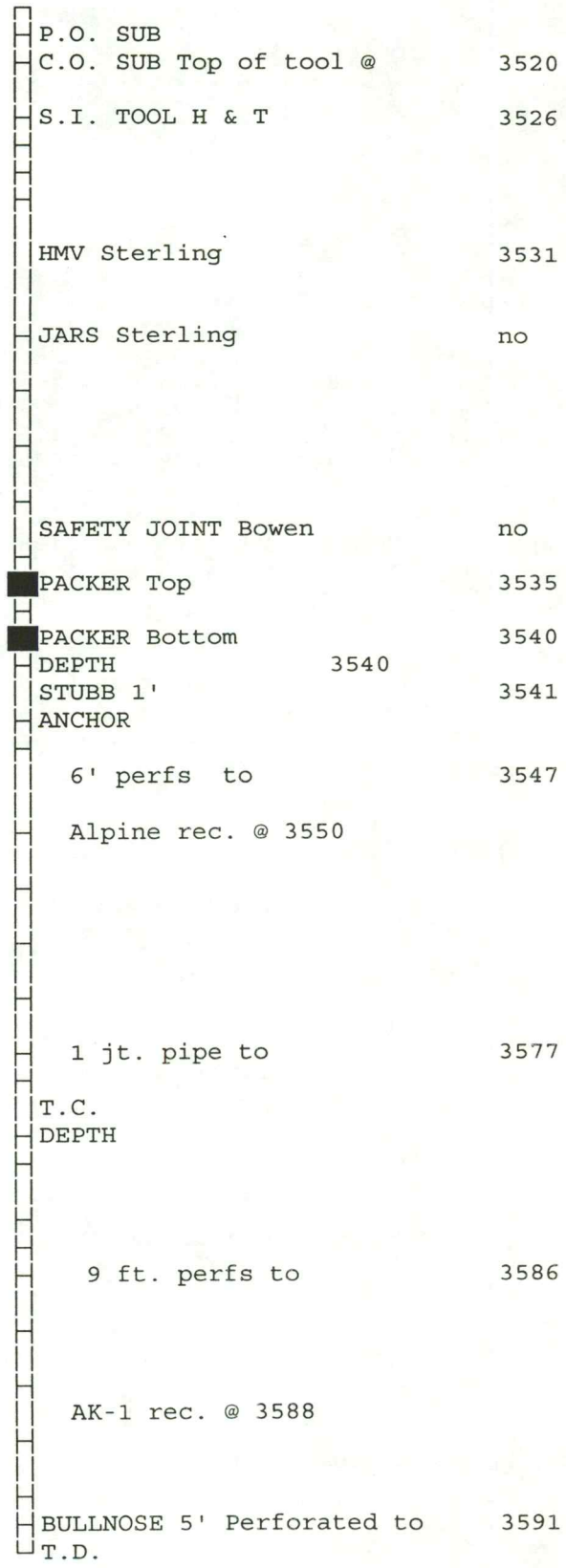
TOTAL DEPTH 3591

TOTAL DRILL PIPE ABOVE K.B. 18

REMARKS:

FLUID SAMPLER DATA (not run)

GAS---------- Cubic Ft.
OIL---------- ML.
MUD---------- ML.
WATER---------- ML.
OTHER---------- ML.
PRESSURE---------- PSI
Rw---------- OHMS @
DEGREES F
CHLORIDES---------- ppm.

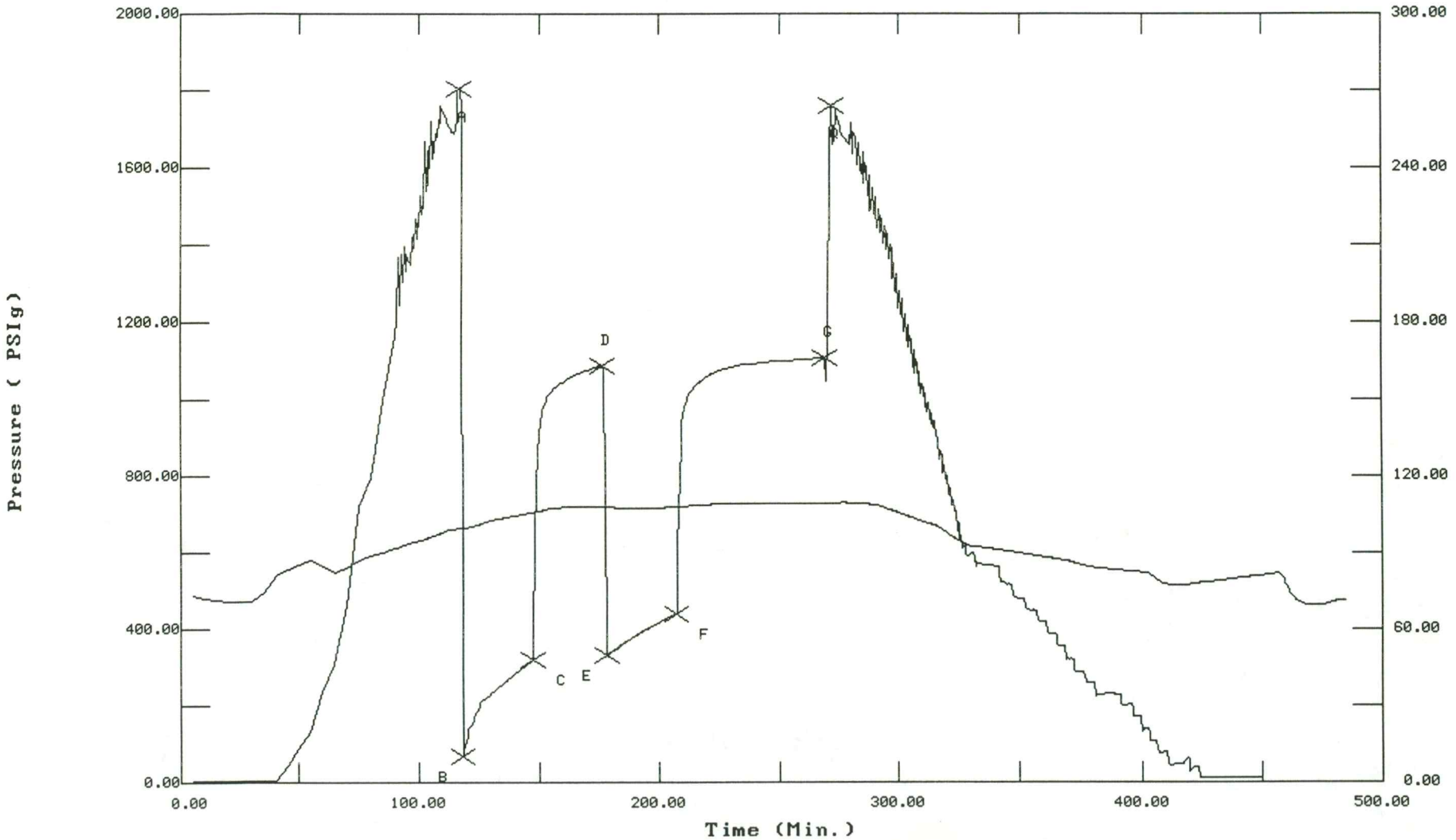


TEST HISTORY

9725 DST#2 MORRISON #1 HAL C. PORTER

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1803.66
B:	0.00	68.26
C:	29.50	318.50
D:	29.00	1085.96
E:	0.00	331.05
F:	29.00	440.70
G:	62.00	1107.69
Q:	0.00	1760.84



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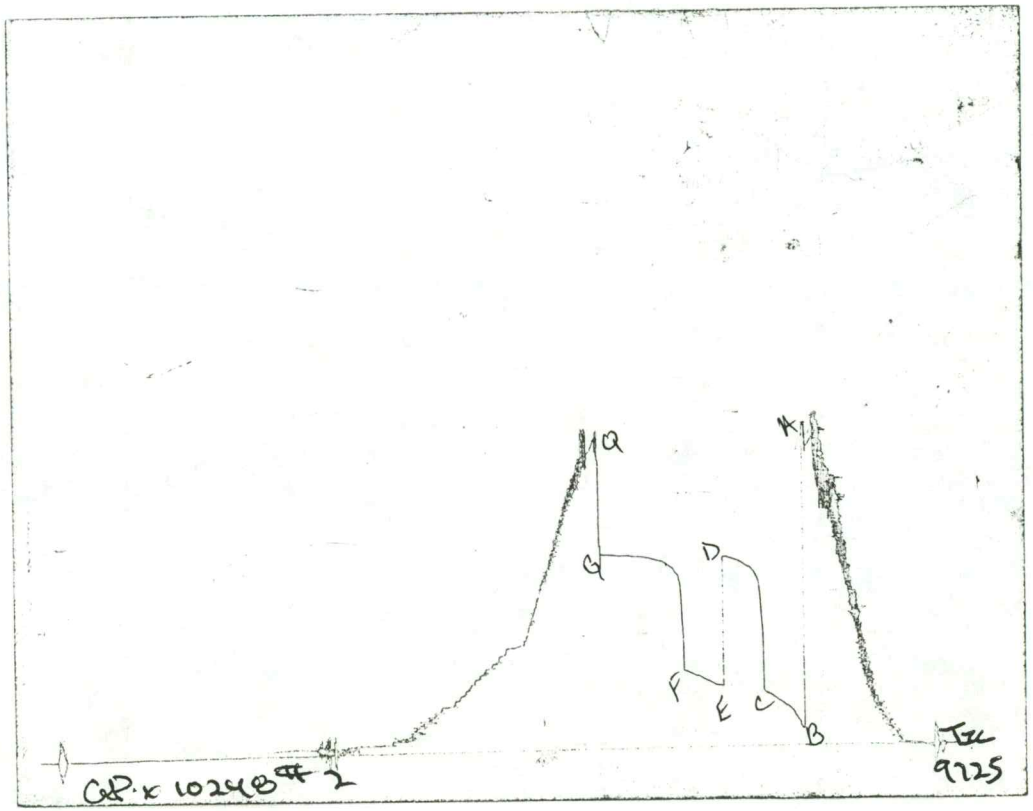


This is a photocopy of the actual AK-1 recorder chart

Operator.....: Imperial American
Well Name.....: Morrison Unit #1
DST Number.....: 2

Location.: 06-21S-13W Stafford KS Recorder No...: 3030
Test Type: conv Recorder Depth: 3550
Formation: Arbuckle Test Interval.: 3540-3591

RESERVOIR CALCULATIONS: Fluid calculations based on shut-in #2

RESERVOIR PARAMETERS USED:

Net Pay	3.00 ft
Porosity	19.00 %
Bottom Hole Temp	109.00 F
Specific Gravity	0.028
API Gravity	37.80
Compressibility	0.000001 /psi
Viscosity	7.7863 cp
Total Recovery	1220.00 ft
Total Flowing Time	60.00 min.
Flow Rate	136.48 bbls/d
Final Flowing Pressure	441.00 psi
Horner Slope	106.5619 psi/cycle
Extrapolated Pressure	1139.96 psi
Formation Volume Factor	1.03 Reservoir/Surface
Well Bore Radius	3.94 in

RESULTS:

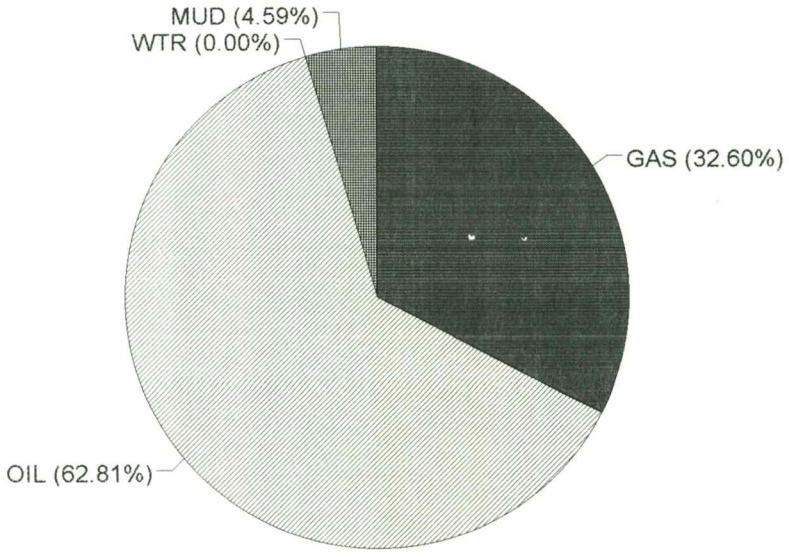
Effective Permeability	555.270130	md
Flow Capacity	1665.8104	md.ft
Transmissibility	213.9412	md.ft/cp
Skin Factor	0.4642	
Radius of Investigation	725.32419	ft
Damage Ratio	1.0655	
Productivity Index	0.1953	bbls/psi.d
Productivity Index W/O Damage.	0.2081	bbls/psi.d

CALCULATED RECOVERY ANALYSIS

DST # 2 TICKET 9725

Drill Pipe	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1			0		0		0		0
2	117	12	14.04	88	102.96		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
Drill Collars									
1	933	12	111.96	88	821.04		0		0
2	170	25	42.5	25	42.5		0	50	85
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1103	14.00	154.46	78.29	863.54	0.00	0	7.706	85

			HRS OP	BBL/DAY
BBL OIL=	5.6868018	*	1	136.483
BBL WATER=	0	*		0
BBL MUD=	0.41565			
BBL GAS	2.9517306			

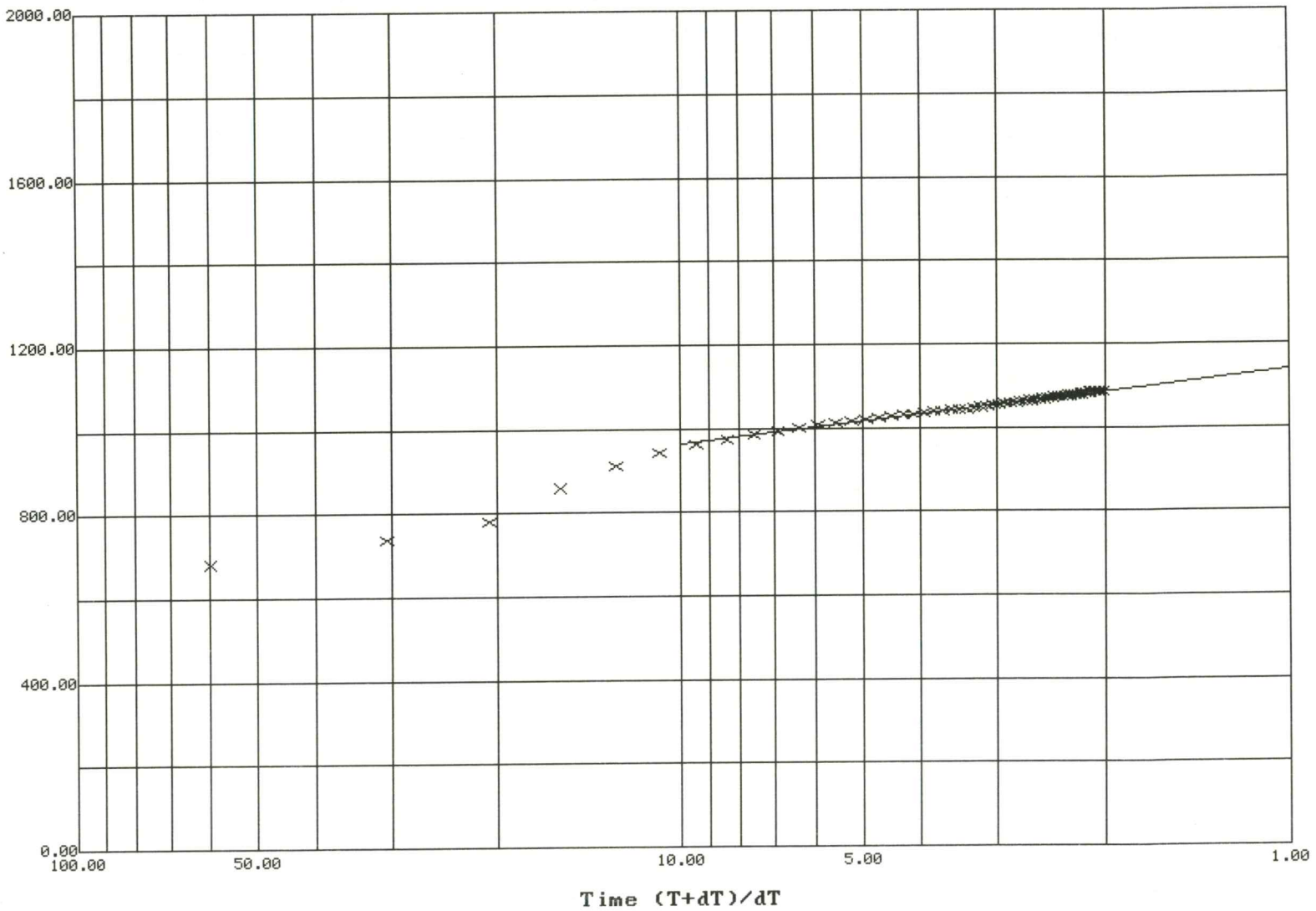


Horner Plot: shut-in #1

9725 DST#2 MORRISON #1 HAL C. PORTER

Slope: 174.8720 PSIg/cycle

Ext. Pressure: 1139.4288 PSIg

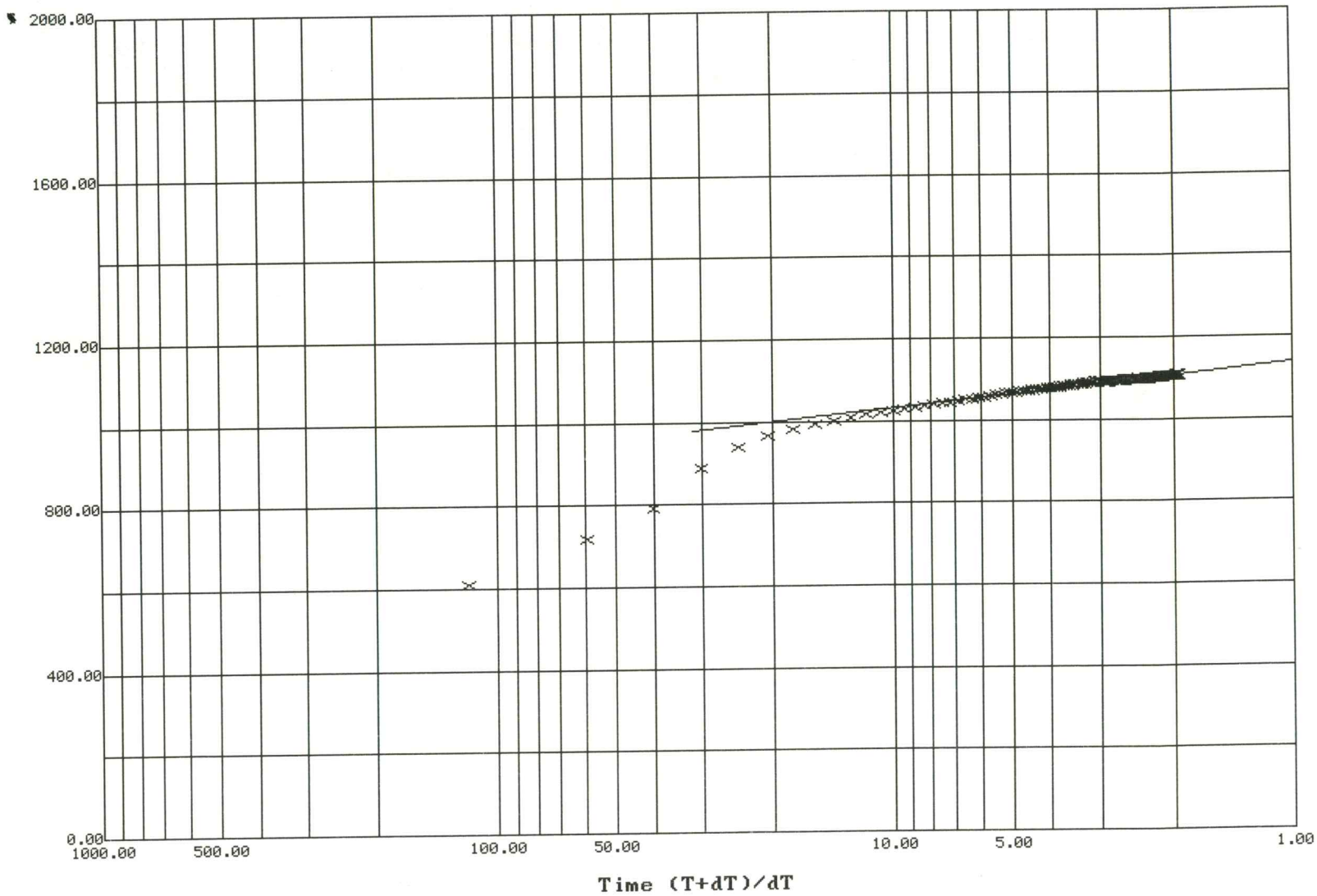


Horner Plot: shut-in #2

9725 DST#2 MORRISON #1 HAL C. PORTER

Slope: 106.5619 PSIg/cycle

Ext. Pressure: 1139.9565 PSIg



ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9725 DST#2 MORRISON #1 HAL C. PORTER

DATE: 06/12/97 TIME: 00:02:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
****** Initial Hydro.	116.50	1803.7	0.0	99.33		
****** Start Flow 1	0.00	68.3	0.0	99.49		
	0.50	80.8	12.5	99.53		
	1.00	95.5	27.2	99.57		
	1.50	108.1	39.9	99.64		
	2.00	122.2	54.0	99.71		
	2.50	137.4	69.2	99.79		
	3.00	141.4	73.1	99.88		
	3.50	148.4	80.1	99.97		
	4.00	155.8	87.5	100.10		
	4.50	163.1	94.8	100.23		
	5.00	170.5	102.3	100.38		
	5.50	177.9	109.6	100.51		
	6.00	184.5	116.3	100.65		
	6.50	191.7	123.4	100.79		
	7.00	199.0	130.7	100.93		
	7.50	205.3	137.1	101.08		
	8.00	210.4	142.2	101.25		
	8.50	213.3	145.0	101.44		
	9.00	215.8	147.5	101.63		
	9.50	218.4	150.2	101.81		
	10.00	220.1	151.8	101.97		
	10.50	222.2	153.9	102.12		
	11.00	224.7	156.4	102.26		
	11.50	227.4	159.1	102.39		
	12.00	230.1	161.9	102.50		
	12.50	232.7	164.5	102.61		
	13.00	235.3	167.0	102.71		
	13.50	237.9	169.6	102.81		
	14.00	240.9	172.6	102.91		
	14.50	243.7	175.5	103.00		
	15.00	246.3	178.0	103.09		
	15.50	248.9	180.7	103.19		
	16.00	251.5	183.3	103.28		
	16.50	254.1	185.8	103.38		
	17.00	256.5	188.2	103.48		
	17.50	259.0	190.7	103.57		
	18.00	261.7	193.4	103.66		
	18.50	264.4	196.2	103.76		
	19.00	267.1	198.8	103.85		
	19.50	269.6	201.3	103.94		
	20.00	272.4	204.1	104.03		
	20.50	275.2	207.0	104.12		
	21.00	277.6	209.3	104.21		
	21.50	280.2	211.9	104.29		
	22.00	282.7	214.5	104.38		
	22.50	285.4	217.2	104.46		
	23.00	287.9	219.6	104.55		
	23.50	290.1	221.8	104.64		
	24.00	292.5	224.3	104.72		
	24.50	295.4	227.1	104.81		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9725 DST#2 MORRISON #1 HAL C. PORTER

DATE: 06/12/97 TIME: 00:02:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	297.6	229.4	104.89		
	25.50	299.9	231.6	104.98		
	26.00	302.2	233.9	105.06		
	26.50	304.9	236.6	105.15		
	27.00	307.1	238.8	105.24		
	27.50	309.3	241.0	105.31		
	28.00	311.6	243.3	105.40		
	28.50	313.8	245.5	105.48		
	29.00	316.2	248.0	105.56		
***** End Flow 1	29.50	318.5	250.2	105.64		
***** Start Shutin 1	0.00	318.5	0.0	105.64	0.0000	0.101
	0.50	681.6	363.1	105.73	60.0000	0.465
	1.00	736.2	417.7	105.82	30.5000	0.542
	1.50	781.1	462.6	105.91	20.6667	0.610
	2.00	859.7	541.2	106.01	15.7500	0.739
	2.50	912.5	594.0	106.13	12.8000	0.833
	3.00	942.9	624.4	106.25	10.8333	0.889
	3.50	963.0	644.5	106.37	9.4286	0.927
	4.00	975.2	656.7	106.50	8.3750	0.951
	4.50	985.1	666.6	106.62	7.5556	0.970
	5.00	993.3	674.8	106.74	6.9000	0.987
	5.50	1000.9	682.4	106.84	6.3636	1.002
	6.00	1007.2	688.7	106.94	5.9167	1.014
	6.50	1011.8	693.3	107.03	5.5385	1.024
	7.00	1016.0	697.5	107.11	5.2143	1.032
	7.50	1020.0	701.5	107.19	4.9333	1.040
	8.00	1023.8	705.3	107.26	4.6875	1.048
	8.50	1027.4	708.9	107.32	4.4706	1.056
	9.00	1030.5	712.0	107.37	4.2778	1.062
	9.50	1033.2	714.7	107.43	4.1053	1.067
	10.00	1036.0	717.5	107.47	3.9500	1.073
	10.50	1038.8	720.3	107.51	3.8095	1.079
	11.00	1041.2	722.7	107.55	3.6818	1.084
	11.50	1042.1	723.6	107.59	3.5652	1.086
	12.00	1042.2	723.7	107.61	3.4583	1.086
	12.50	1043.4	724.9	107.65	3.3600	1.089
	13.00	1045.9	727.4	107.67	3.2692	1.094
	13.50	1049.6	731.1	107.69	3.1852	1.102
	14.00	1052.2	733.7	107.71	3.1071	1.107
	14.50	1054.2	735.7	107.73	3.0345	1.111
	15.00	1055.9	737.4	107.75	2.9667	1.115
	15.50	1057.6	739.1	107.77	2.9032	1.119
	16.00	1059.2	740.7	107.78	2.8438	1.122
	16.50	1060.6	742.1	107.79	2.7879	1.125
	17.00	1062.0	743.5	107.81	2.7353	1.128
	17.50	1063.7	745.2	107.82	2.6857	1.131
	18.00	1065.1	746.6	107.82	2.6389	1.134
	18.50	1066.3	747.8	107.83	2.5946	1.137
	19.00	1067.4	748.9	107.84	2.5526	1.139
	19.50	1068.5	750.0	107.84	2.5128	1.142
	20.00	1069.9	751.4	107.85	2.4750	1.145

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9725 DST#2 MORRISON #1 HAL C. PORTER

DATE: 06/12/97 TIME: 00:02:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	20.50	1071.5	753.0	107.86	2.4390	1.148
	21.00	1073.4	754.9	107.86	2.4048	1.152
	21.50	1074.8	756.3	107.86	2.3721	1.155
	22.00	1075.0	756.5	107.86	2.3409	1.156
	22.50	1075.8	757.3	107.87	2.3111	1.157
	23.00	1076.6	758.1	107.87	2.2826	1.159
	23.50	1077.5	759.0	107.87	2.2553	1.161
	24.00	1078.4	759.9	107.87	2.2292	1.163
	24.50	1079.4	760.9	107.87	2.2041	1.165
	25.00	1080.4	761.9	107.87	2.1800	1.167
	25.50	1082.0	763.5	107.87	2.1569	1.171
	26.00	1083.1	764.6	107.87	2.1346	1.173
	26.50	1084.3	765.8	107.87	2.1132	1.176
	27.00	1085.2	766.7	107.87	2.0926	1.178
	27.50	1085.9	767.4	107.87	2.0727	1.179
	28.00	1086.6	768.1	107.87	2.0536	1.181
	28.50	1087.2	768.7	107.86	2.0351	1.182
****** End Shut-in 1	29.00	1086.0	767.5	107.86	2.0172	1.179
****** Start Flow 2	0.00	331.1	0.0	107.85		
	0.50	332.7	1.6	107.83		
	1.00	334.6	3.5	107.79		
	1.50	336.9	5.9	107.75		
	2.00	339.1	8.1	107.70		
	2.50	341.4	10.3	107.66		
	3.00	343.9	12.9	107.61		
	3.50	346.2	15.1	107.57		
	4.00	348.4	17.3	107.53		
	4.50	350.6	19.5	107.49		
	5.00	352.9	21.9	107.46		
	5.50	355.0	23.9	107.43		
	6.00	357.1	26.0	107.41		
	6.50	359.2	28.1	107.39		
	7.00	361.6	30.5	107.37		
	7.50	363.7	32.6	107.35		
	8.00	365.7	34.7	107.34		
	8.50	367.8	36.8	107.33		
	9.00	370.1	39.0	107.31		
	9.50	372.0	41.0	107.31		
	10.00	374.0	43.0	107.30		
	10.50	376.0	45.0	107.30		
	11.00	377.9	46.9	107.30		
	11.50	380.2	49.2	107.30		
	12.00	382.1	51.0	107.30		
	12.50	384.0	53.0	107.30		
	13.00	385.9	54.9	107.30		
	13.50	387.7	56.7	107.31		
	14.00	389.6	58.6	107.32		
	14.50	391.6	60.6	107.33		
	15.00	393.5	62.4	107.34		
	15.50	395.3	64.3	107.35		
	16.00	397.0	66.0	107.36		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9725 DST#2 MORRISON #1 HAL C. PORTER

DATE: 06/12/97 TIME: 00:02:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	16.50	398.8	67.7	107.37		
	17.00	400.6	69.5	107.38		
	17.50	402.3	71.3	107.40		
	18.00	404.3	73.3	107.41		
	18.50	406.0	74.9	107.42		
	19.00	407.7	76.6	107.43		
	19.50	409.4	78.3	107.45		
	20.00	411.1	80.0	107.47		
	20.50	412.8	81.8	107.48		
	21.00	414.6	83.6	107.50		
	21.50	416.4	85.3	107.51		
	22.00	418.0	86.9	107.53		
	22.50	419.7	88.6	107.55		
	23.00	421.4	90.3	107.57		
	23.50	423.0	92.0	107.58		
	24.00	424.6	93.5	107.60		
	24.50	426.4	95.4	107.62		
	25.00	428.0	97.0	107.63		
	25.50	429.6	98.5	107.65		
	26.00	431.1	100.1	107.67		
	26.50	432.7	101.6	107.69		
	27.00	434.2	103.2	107.71		
	27.50	436.0	104.9	107.72		
	28.00	437.6	106.6	107.75		
	28.50	439.2	108.1	107.76		
******	End Flow 2 29.00	440.7	109.6	107.78		
******	Start Shutin 2 0.00	440.7	0.0	107.78	0.0000	0.194
	0.50	610.6	169.9	107.80	118.0000	0.373
	1.00	717.1	276.4	107.83	59.5000	0.514
	1.50	792.6	351.9	107.85	40.0000	0.628
	2.00	887.8	447.1	107.89	30.2500	0.788
	2.50	938.2	497.5	107.92	24.4000	0.880
	3.00	964.9	524.2	107.97	20.5000	0.931
	3.50	980.7	540.0	108.02	17.7143	0.962
	4.00	992.2	551.5	108.07	15.6250	0.985
	4.50	1001.6	560.9	108.12	14.0000	1.003
	5.00	1008.9	568.2	108.16	12.7000	1.018
	5.50	1015.1	574.4	108.21	11.6364	1.030
	6.00	1020.8	580.1	108.26	10.7500	1.042
	6.50	1025.5	584.8	108.30	10.0000	1.052
	7.00	1029.6	588.9	108.34	9.3571	1.060
	7.50	1033.2	592.5	108.39	8.8000	1.068
	8.00	1036.5	595.8	108.42	8.3125	1.074
	8.50	1039.4	598.7	108.46	7.8824	1.080
	9.00	1042.2	601.5	108.50	7.5000	1.086
	9.50	1044.8	604.1	108.53	7.1579	1.092
	10.00	1047.2	606.5	108.57	6.8500	1.097
	10.50	1049.7	609.0	108.60	6.5714	1.102
	11.00	1052.1	611.4	108.63	6.3182	1.107
	11.50	1054.5	613.8	108.66	6.0870	1.112
	12.00	1056.7	616.0	108.69	5.8750	1.117

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9725 DST#2 MORRISON #1 HAL C. PORTER

DATE: 06/12/97 TIME: 00:02:17

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
12.50	1059.3	618.6	108.72	5.6800	1.122
13.00	1061.4	620.7	108.75	5.5000	1.127
13.50	1063.7	623.0	108.78	5.3333	1.131
14.00	1065.4	624.7	108.80	5.1786	1.135
14.50	1066.5	625.8	108.82	5.0345	1.137
15.00	1067.8	627.1	108.85	4.9000	1.140
15.50	1069.2	628.5	108.87	4.7742	1.143
16.00	1070.6	629.9	108.88	4.6562	1.146
16.50	1071.6	630.9	108.90	4.5455	1.148
17.00	1072.8	632.1	108.91	4.4412	1.151
17.50	1073.9	633.2	108.94	4.3429	1.153
18.00	1075.0	634.3	108.95	4.2500	1.156
18.50	1076.0	635.3	108.96	4.1622	1.158
19.00	1077.0	636.3	108.97	4.0789	1.160
19.50	1077.9	637.2	108.99	4.0000	1.162
20.00	1078.8	638.1	109.00	3.9250	1.164
20.50	1079.7	639.0	109.01	3.8537	1.166
21.00	1080.6	639.9	109.02	3.7857	1.168
21.50	1081.4	640.7	109.03	3.7209	1.169
22.00	1082.3	641.6	109.04	3.6591	1.171
22.50	1083.1	642.4	109.05	3.6000	1.173
23.00	1084.0	643.3	109.06	3.5435	1.175
23.50	1084.8	644.1	109.06	3.4894	1.177
24.00	1085.3	644.6	109.07	3.4375	1.178
24.50	1086.2	645.5	109.08	3.3878	1.180
25.00	1087.3	646.6	109.08	3.3400	1.182
25.50	1088.1	647.4	109.09	3.2941	1.184
26.00	1088.9	648.2	109.10	3.2500	1.186
26.50	1089.6	648.9	109.11	3.2075	1.187
27.00	1090.3	649.6	109.11	3.1667	1.189
27.50	1091.0	650.3	109.11	3.1273	1.190
28.00	1091.6	650.9	109.12	3.0893	1.192
28.50	1092.5	651.8	109.13	3.0526	1.193
29.00	1093.0	652.3	109.13	3.0172	1.195
29.50	1092.3	651.6	109.13	2.9831	1.193
30.00	1091.5	650.8	109.13	2.9500	1.191
30.50	1091.5	650.8	109.14	2.9180	1.191
31.00	1091.8	651.1	109.14	2.8871	1.192
31.50	1092.0	651.3	109.14	2.8571	1.192
32.00	1092.4	651.7	109.15	2.8281	1.193
32.50	1092.9	652.2	109.14	2.8000	1.194
33.00	1093.3	652.6	109.15	2.7727	1.195
33.50	1093.7	653.0	109.15	2.7463	1.196
34.00	1094.1	653.4	109.15	2.7206	1.197
34.50	1094.6	653.9	109.15	2.6957	1.198
35.00	1095.1	654.4	109.15	2.6714	1.199
35.50	1095.4	654.7	109.15	2.6479	1.200
36.00	1095.7	655.0	109.15	2.6250	1.201
36.50	1096.1	655.4	109.15	2.6027	1.201
37.00	1096.5	655.8	109.14	2.5811	1.202
37.50	1096.9	656.2	109.15	2.5600	1.203

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 9725 DST#2 MORRISON #1 HAL C. PORTER

DATE: 06/12/97 TIME: 00:02:17

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	38.00	1097.3	656.6	109.14	2.5395	1.204
	38.50	1097.6	656.9	109.14	2.5195	1.205
	39.00	1098.0	657.3	109.14	2.5000	1.206
	39.50	1098.3	657.6	109.14	2.4810	1.206
	40.00	1098.7	658.0	109.14	2.4625	1.207
	40.50	1099.1	658.4	109.14	2.4444	1.208
	41.00	1099.4	658.7	109.14	2.4268	1.209
	41.50	1099.7	659.0	109.14	2.4096	1.209
	42.00	1098.6	657.9	109.14	2.3929	1.207
	42.50	1098.7	658.0	109.14	2.3765	1.207
	43.00	1098.8	658.1	109.14	2.3605	1.207
	43.50	1098.9	658.2	109.13	2.3448	1.208
	44.00	1099.1	658.4	109.13	2.3295	1.208
	44.50	1099.3	658.6	109.13	2.3146	1.209
	45.00	1099.7	659.0	109.13	2.3000	1.209
	45.50	1099.9	659.2	109.13	2.2857	1.210
	46.00	1100.2	659.5	109.13	2.2717	1.210
	46.50	1100.4	659.7	109.13	2.2581	1.211
	47.00	1100.8	660.1	109.12	2.2447	1.212
	47.50	1101.1	660.4	109.12	2.2316	1.213
	48.00	1101.4	660.7	109.12	2.2188	1.213
	48.50	1101.7	661.0	109.12	2.2062	1.214
	49.00	1102.1	661.4	109.11	2.1939	1.215
	49.50	1102.4	661.7	109.11	2.1818	1.215
	50.00	1102.7	662.0	109.11	2.1700	1.216
	50.50	1103.0	662.3	109.11	2.1584	1.217
	51.00	1103.3	662.6	109.10	2.1471	1.217
	51.50	1103.6	662.9	109.10	2.1359	1.218
	52.00	1103.8	663.1	109.10	2.1250	1.218
	52.50	1104.1	663.4	109.10	2.1143	1.219
	53.00	1104.3	663.6	109.10	2.1038	1.220
	53.50	1104.6	663.9	109.09	2.0935	1.220
	54.00	1104.8	664.1	109.09	2.0833	1.221
	54.50	1105.0	664.3	109.09	2.0734	1.221
	55.00	1105.2	664.5	109.09	2.0636	1.222
	55.50	1105.5	664.8	109.09	2.0541	1.222
	56.00	1105.7	665.0	109.08	2.0446	1.223
	56.50	1105.8	665.1	109.08	2.0354	1.223
	57.00	1105.9	665.2	109.08	2.0263	1.223
	57.50	1106.0	665.3	109.07	2.0174	1.223
	58.00	1106.0	665.3	109.07	2.0086	1.223
	58.50	1106.3	665.6	109.07	2.0000	1.224
	59.00	1106.6	665.9	109.06	1.9915	1.225
	59.50	1106.8	666.1	109.06	1.9832	1.225
	60.00	1107.0	666.3	109.06	1.9750	1.225
	60.50	1107.1	666.4	109.06	1.9669	1.226
	61.00	1107.3	666.6	109.06	1.9590	1.226
	61.50	1107.5	666.8	109.05	1.9512	1.227
******	End Shut-in 2 62.00	1107.7	667.0	109.05	1.9435	1.227
******	Final Hydro. 272.00	1760.8	0.0	109.07		

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 9725

Well Name & No. MORRISON UNIT #1 Test No. 2 Date 6-12-97

Company HAL C. PORTER Zone Tested ARBUCKLE

Address P.O. Box 18515 / FOUNTAIN HILLS AZ. 85269 Elevation 1923 KB 1914 GL

Co. Rep / Geo. RANDALL KILIAN Cont. STERLING DRLG #4 Est. Ft. of Pay 5 Por. 12 %

Location: Sec. 6 Twp. 21S Rge. 13W Co. STAFFORD State KS.

No. of Copies 5 Distribution Sheet (Y, N) N Turnkey (Y, N) ~ Evaluation (Y, N) ~

Interval Tested 3540 - 3591' Initial Str Wt./Lbs. 44,000 Unseated Str Wt./Lbs. 68,000

Anchor Length 51' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 72,000

Top Packer Depth 3535' Tool Weight 2100 #

Bottom Packer Depth 3540' Hole Size — 7 7/8" ✓ Rubber Size — 6 3/4" ✓

Total Depth 3591' Wt. Pipe Run NONE Drill Collar Run 483'

Mud Wt. 9.2 LCM ~ Vis. 52 WL 8.8cc. Drill Pipe Size 4½ X.H. Ft. Run 3095'

Blow Description IF: Strong blow. Btm. of bucket in 3 mins.
ISI: Weak to fair blow. (1-8")
FF: Strong blow. Btm. of bucket in 4 mins.
FSI: Weak blow. (½")

Recovery — Total Feet 1220 GIP 620 Ft. in DC 483 Ft. in DP 737'

Rec. 1050	Feet Of	Clean Gassy Oil	12 %gas	88 %oil	%water		%mud
Rec. 170	Feet Of	G.O.C.M.	25 %gas	25 %oil	%water	50	%mud
Rec.	Feet Of		%gas	%oil	%water		%mud
Rec.	Feet Of		%gas	%oil	%water		%mud
Rec.	Feet Of		%gas	%oil	%water		%mud

BHT 109 °F Gravity 38 °API D@ 72 °F Corrected Gravity 37.6 °API

RW N.C. @ ~ °F Chlorides 4,000 ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud	1824	1804	PSI	Recorder No.	10248	T-Started	0002
(B) First Initial Flow Pressure	87	68	PSI	(depth)	3588'	T-Open	0205
(C) First Final Flow Pressure	333	318	PSI	Recorder No. (alpine)	3030	T-Pulled	0437
(D) Initial Shut-in Pressure	1097	1086	PSI	(depth)	3550'	T-Out	0750
(E) Second Initial Flow Pressure	359	331	PSI	Recorder No.	~		
(F) Second Final Flow Pressure	453	441	PSI	(depth)	~		
(G) Final Shut-in Pressure	1122	1108	PSI	Initial Opening	30	Test	✓ 600.00
(H) Final Hydrostatic Mud	1778	1761	PSI	Initial Shut-in	30	Jars	
	AK-1	alpine		Final Flow	30	Safety Joint	
				Final Shut-in	60	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Elect. Rec.	✓ 150.00
						Other	
						TOTAL PRICE $	✓ 750.00

Approved By Randall K. Kilian

Our Representative Tony Pinotti